In the claims:

1. (Currently amended) A phosphorus-containing flame-retardant hardener having a formula selecting from the group consisting of (A) to (I):

(A)   (B)

(C)   (D)

(E)   (F)

(G)   (H)

(I)
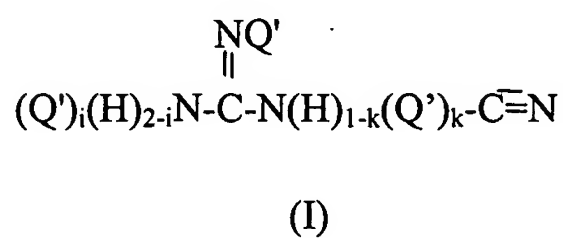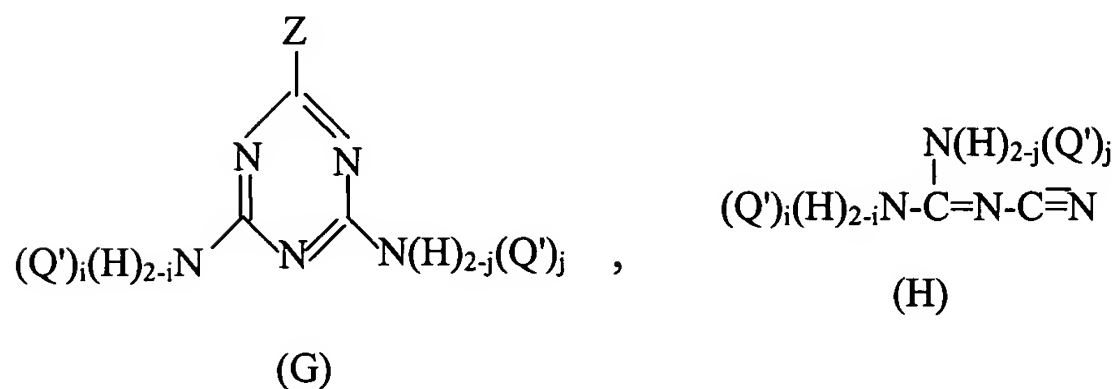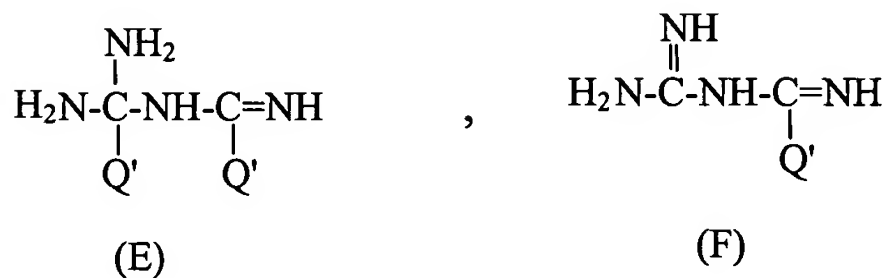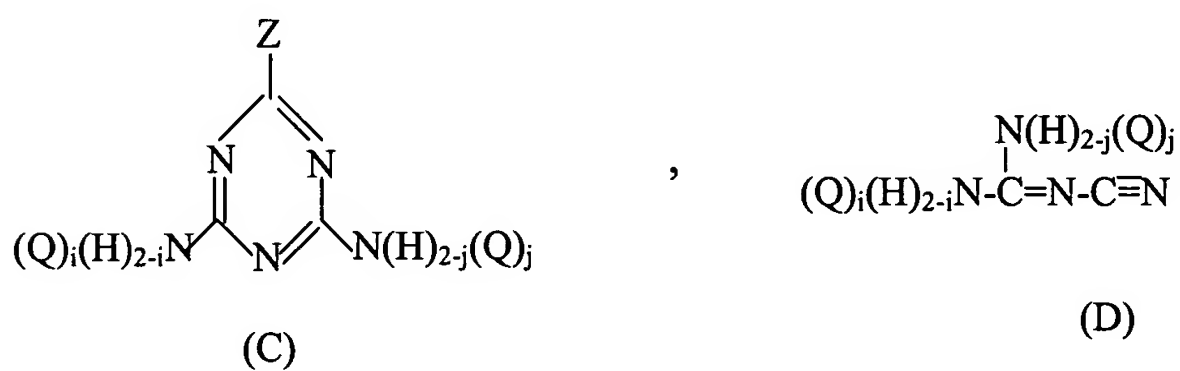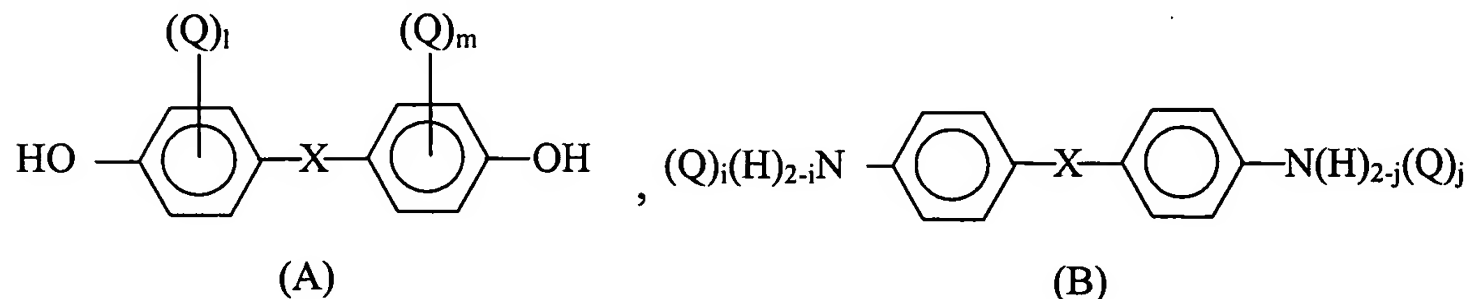
wherein

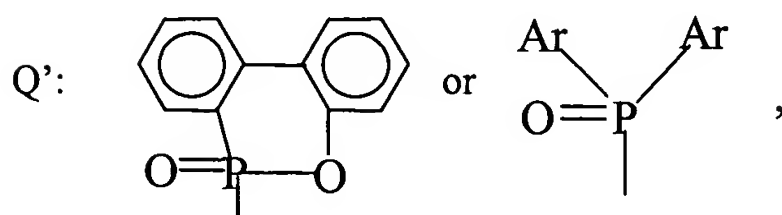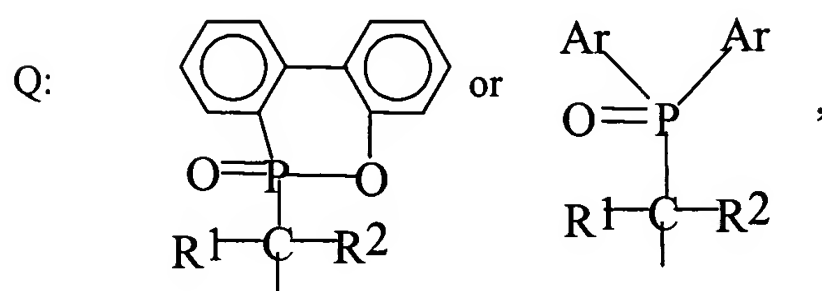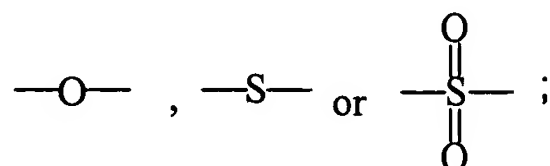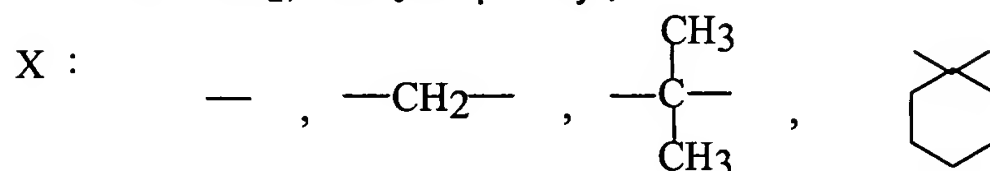l and m independently are 0, 1 or 2, and $l + m > 0$; i and j independently are 0, 1 or 2, and $0 < i + j < 4$; k is 0 or 1, and $i + k < 3$;

Z is $-NH_2$, $-CH_3$ or phenyl;

X :

Q:

Q':

wherein

R^1, R^2 independently are H, C1~C18 alkyl, C6~C18 aryl, C6~C18 substituted aryl, C6~C18 aryl methylene, or C6~C18 substituted aryl methylene;
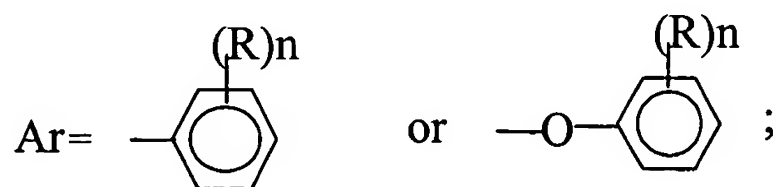
wherein R is C1-C4 alkyl or C6-C18 aryl; and n is an integer of 0 to 5,

wherein when said hardener has the formula (C):

Q: $O = P \overset{\displaystyle Ar \quad Ar}{\underset{\displaystyle R^1 - C - R^2}{|}}$, and

wherein when said hardener has the formula of (G):

Q':

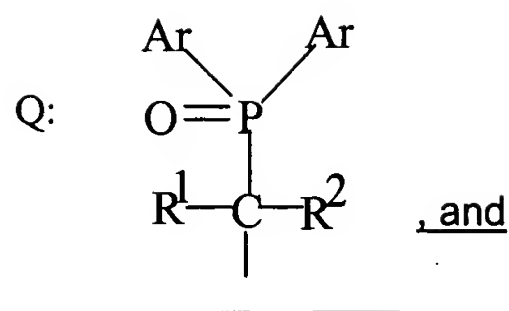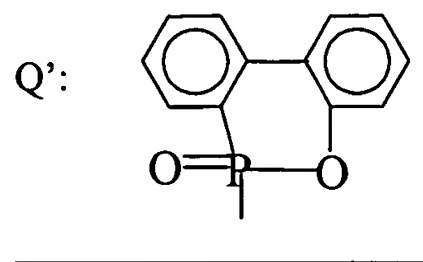2. (Original) The hardener according to claim 1, wherein the hardener has the formula (A).

3. (Original) The hardener according to claim 1, wherein the hardener has the formula (B).

4. (Original) The hardener according to claim 1, wherein the hardener has the formula (C).

5. (Original) The hardener according to claim 1, wherein the hardener has the formula (D).

6. (Original) The hardener according to claim 1, wherein the hardener has the formula (E) or (F).

7. (Original) The hardener according to claim 1, wherein the hardener has formula (G).

8.(Original) The hardener according to claim 1, wherein the hardener has the formula (H) or (I).

9. (Original) The hardener according to claim 1, wherein i and j are 0 or 1, when the hardener has a formula selected from the group consisting of (B), (C), (D), (G) and (H).

10. (Original) The hardener according to claim 8, wherein k is 0, when the hardener has the formula (I).

11. (Original) The hardener according to claim 4, wherein Z is $-NH_2$.

12. (Original) The hardener according to claim 7, wherein Z is $-NH_2$.

13. (Original) The hardener according to claim 2, wherein R^1 and R^2 are hydrogen, and n is 0.

14. (Original) The hardener according to claim 3, wherein R^1 and R^2 are hydrogen, and n is 0.

15. (Original) The hardener according to claim 4, wherein R^1 and R^2 are hydrogen, and n is 0.

16. (Original) The hardener according to claim 5, wherein R^1 and R^2 are hydrogen, and n is 0.

17. (Original) The hardener according to claim 13, wherein Ar is phenoxy.

18. (Original) The hardener according to claim 14, wherein Ar is phenoxy.

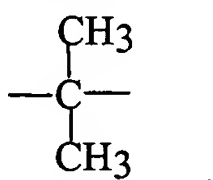19. (Original) The hardener according to claim 15, wherein Ar is phenoxy.

20. (Original) The hardener according to claim 16, wherein Ar is phenoxy.

21. (Original) The hardener according to claim 6, wherein Ar is phenyl.
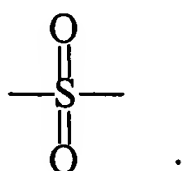
22. (Original) The hardener according to claim 7, wherein Ar is phenyl.

23. (Original) The hardener according to claim 8, wherein Ar is phenyl.
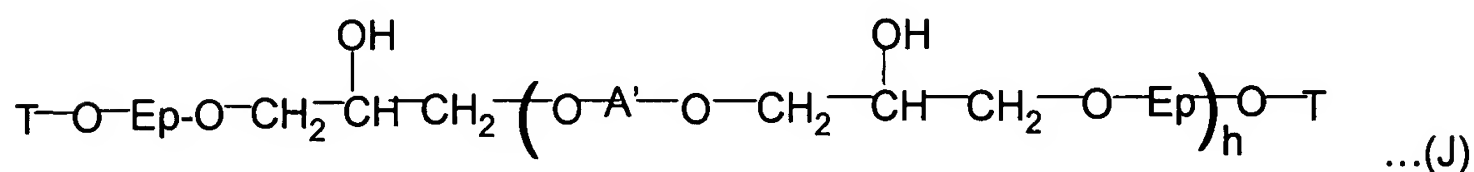
24. (Original) The hardener according to claim 2, wherein X is

$$
\begin{array}{c}
CH_3 \\
| \\
-C- \\
| \\
CH_3
\end{array}
$$

25. (Original) The hardener according to claim 3, wherein X is $-CH_2-$ or

$$
\begin{array}{c}
O \\
\| \\
-S- \\
\| \\
O
\end{array}
$$
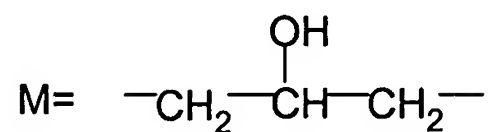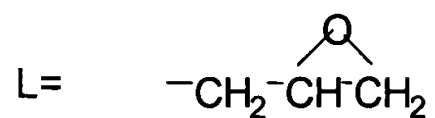
26. (Withdrawn) A phosphorus-containing frame-retardant advanced epoxy resin and cured epoxy resin having the following formula (J):

$$
T-O-Ep-O-CH_2-\overset{\overset{\displaystyle OH}{|}}{CH}-CH_2 \left(O-A'-O-CH_2-\overset{\overset{\displaystyle OH}{|}}{CH}-CH_2-O-Ep \right)_h O-T \quad \ldots(J)
$$

wherein

$0 < h < 10$;

T = L or M, wherein

$$L = \quad -CH_2-\overset{\displaystyle O}{\overset{\displaystyle \diagup\!\!\!\diagdown}{CH}}CH_2$$

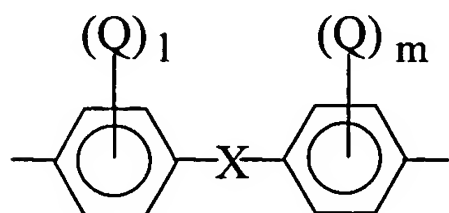$$M = \quad -CH_2-\overset{\displaystyle OH}{\underset{}{CH}}-CH_2-$$
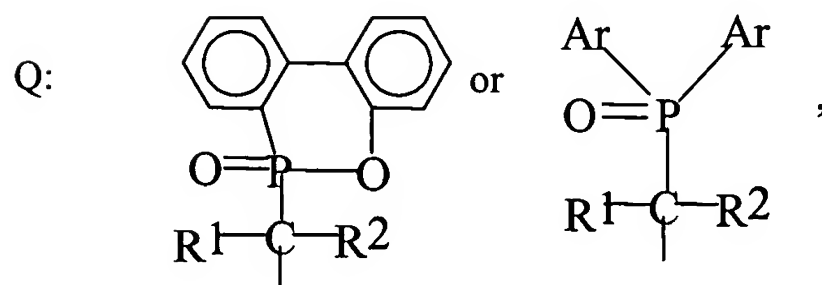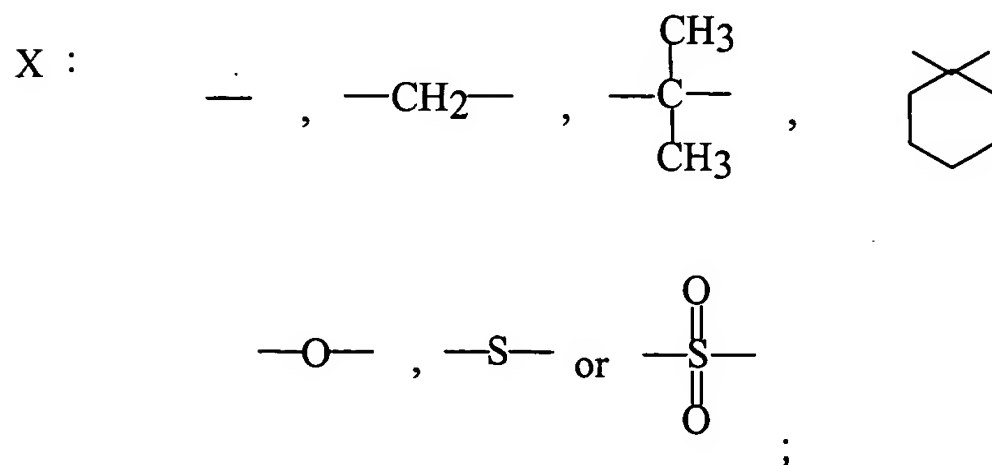
the formula (J) represents the advanced epoxy resin, when T = L; and the formula (J) represents the cured epoxy resin, when T = M;

A' is

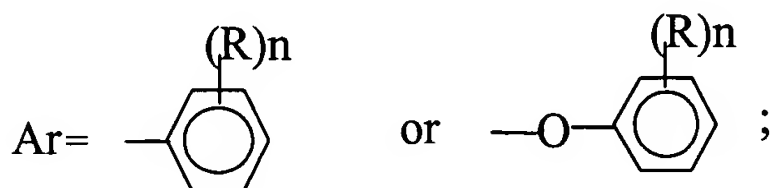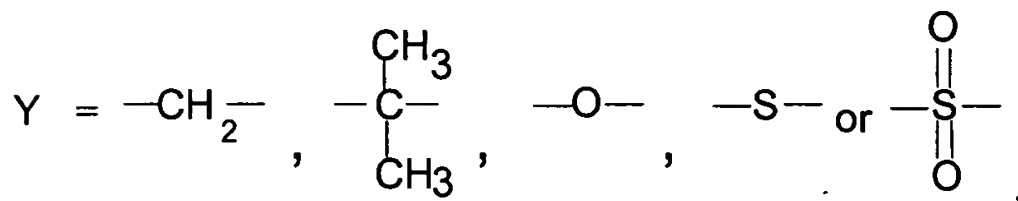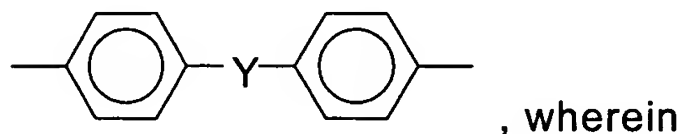wherein l and m are independently are 0, 1 or 2, and l + m > 0;

X :

Q:

wherein

R^1, R^2 independently are H, C1~C18 alkyl, C6~C18 aryl, C6~C18 substituted aryl, C6~C18 aryl methylene, or C6~C18 substituted aryl methylene;

Ar=

wherein R is C1-C4 alkyl or C6-C18 aryl; and n is an integer of 0 to 5;

Ep is

, wherein

$Y = -CH_2-$, $\underset{CH_3}{\overset{CH_3}{-\overset{|}{\underset{|}{C}}-}}$, $-O-$, $-S-$ or $\underset{O}{\overset{O}{-\overset{\|}{\underset{\|}{S}}-}}$,
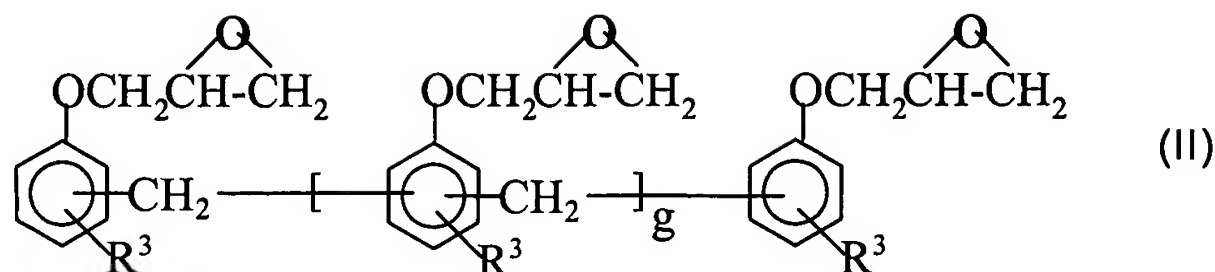
or a phenol-aldehyde novolac epoxy resin backbone, and when Ep is the phenol-aldehyde novolac epoxy resin backbone, the flame-retardant advanced epoxy resin and the cured epoxy resin represented by the formula (J) is prepared by reacting a phosphorus-containing flame-retardant hardener having the following formula (A) with a phenol-aldehyde novolac epoxy resin having the following formula (II)
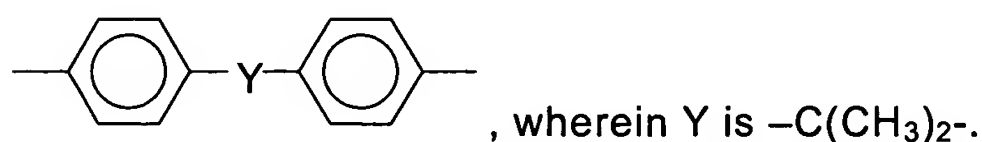
$(Q)_l$ $(Q)_m$

HO —X— OH

(A)
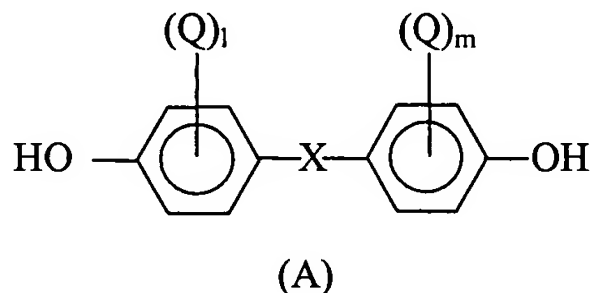
wherein Q, X, l and m are defined as above;

$$\text{(II)}$$

wherein R^3 is hydrogen, or $-CH_3$, and g is an integer of 1-6.

27. (Withdrawn) The phosphorus-containing frame-retardant advanced epoxy resin and cured epoxy resin according to claim 26, wherein Ep in the formula (J) is

, wherein Y is $-C(CH_3)_2-$.

28. (Withdrawn) The phosphorus-containing frame-retardant advanced epoxy resin and cured epoxy resin according to claim 26, wherein Ep in the formula (J) is the phenol-aldehyde novolac epoxy resin backbone, wherein R^3 in the phenol-aldehyde novolac epoxy resin (II) is $-CH_3$.

29. (Withdrawn) The phosphorus-containing frame-retardant advanced epoxy resin and cured epoxy resin according to claim 26, wherein R^1 and R^2 are hydrogen, and n is 0.
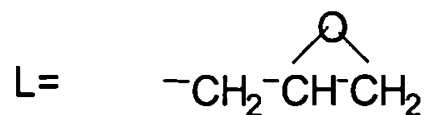
30. (Withdrawn) The phosphorus-containing frame-retardant advanced epoxy resin and cured epoxy resin according to claim 26, wherein X is
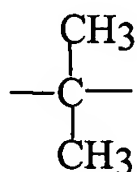
31. (Withdrawn) A flame-retardant epoxy resin having a formula selected from the group consisting of (EP-A) to (EP-I):

(EP-A)

(EP-B)

(EP-C)

(EP-D)

(EP-E)

(EP-F)

(EP-G)

(EP-H)

(EP-I)
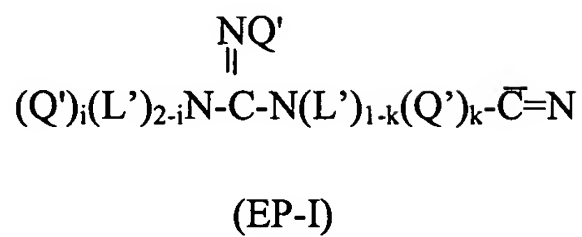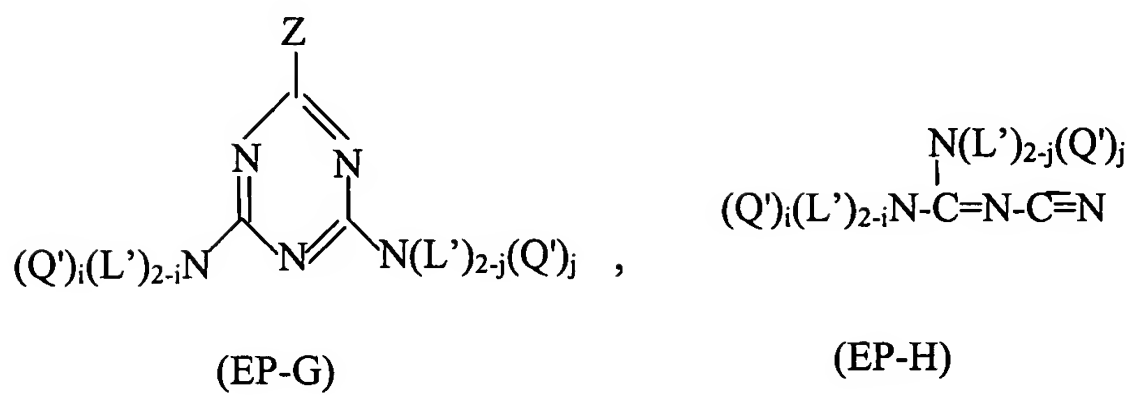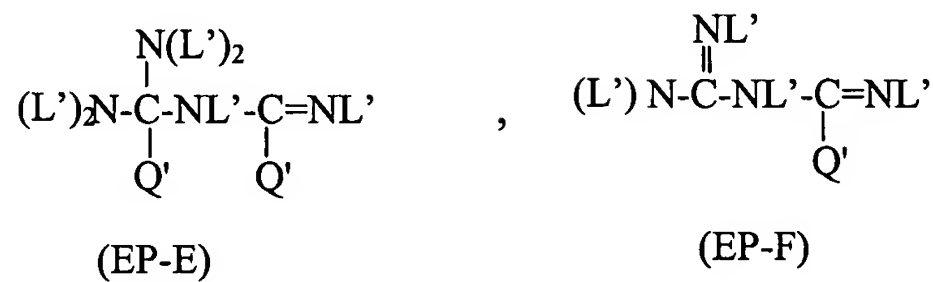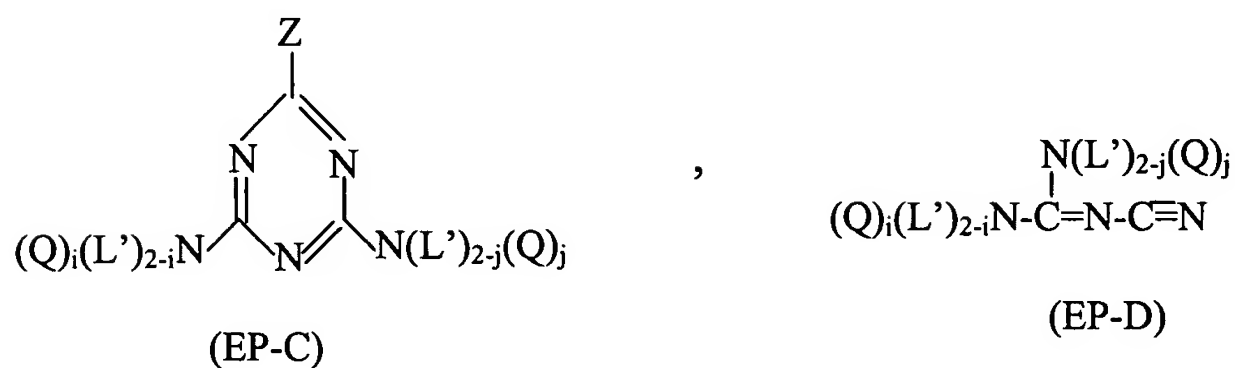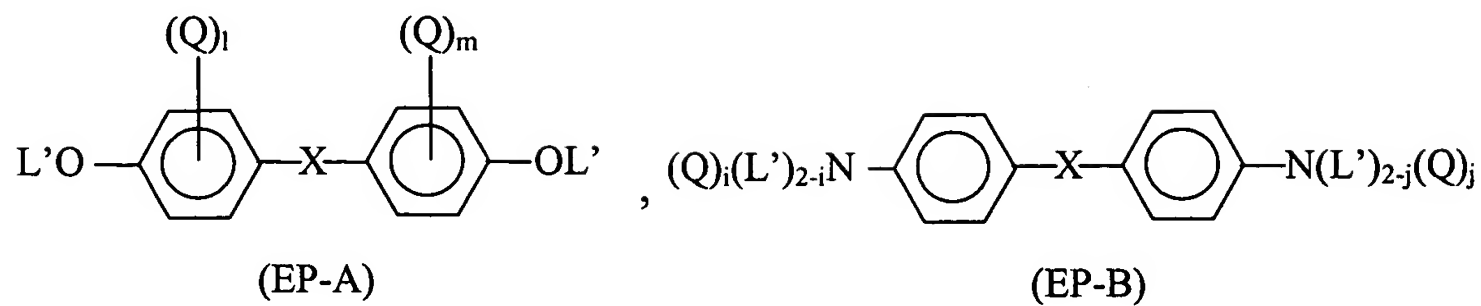
wherein l, m, i, j, k, Z, X, Q and Q' are defined as in claim 1; and L' is hydrogen or

L= $-CH_2-CH-CH_2$ (epoxide)

, provided that at least two L' are L in each formula.

32. (Withdrawn) The flame-retardant epoxy resin according to claim 31, wherein the flame retardant epoxy resin has the formula (EP-A).

33. (Withdrawn) The flame-retardant epoxy resin according to claim 31, wherein the flame retardant epoxy resin has the formula (EP-B).

34. (Withdrawn) The frame-retardant epoxy resin according to claim 32, wherein R^1 and R^2 are hydrogen, and n is 0.

35. (Withdrawn) The frame-retardant epoxy resin according to claim 33, wherein R^1 and R^2 are hydrogen, and n is 0.

36. (Withdrawn) The frame-retardant epoxy resin according to claim 34, wherein X is

$$-\overset{\displaystyle CH_3}{\underset{\displaystyle CH_3}{\overset{|}{\underset{|}{C}}}}-$$
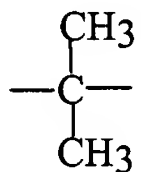
37. (Withdrawn) The frame-retardant epoxy resin according to claim 35, wherein X is $-CH_2-$ or

$$-\overset{\displaystyle O}{\underset{\displaystyle O}{\overset{\|}{\underset{\|}{S}}}}-$$